

CLAIMS

I claim:

1. Destemming method applicable to harvesting machines characterized in that the following takes place in succession, when feeding the rough harvest between the sloping end of the harvest conveyors (4) and the harvest collection bowls (3) on said machines:

- in a first step, extracting of the juice and the grapes detached from the stems by the crop package (1);

- in a second step, picking-off of the grape bunches not already destemmed that form the remaining part of the rough harvest.

2. Destemming device intended to be installed on a harvesting machine between the sloping end of the harvest conveyors (4) and the harvest collection bowls (3) on said machine, characterized on that it comprises:

- upstream, in the direction of the supply of the rough harvest (V), an extractor system (5) for extracting the juice and the grapes (B) detached from the stems with the crop package (1); and,

- downstream, a stemmer (6, 6') provided with an inlet that communicates with the sloping end of the extractor system, said stemmer enabling the hacking of the bunches (G) forming the remaining part of the harvest and the rejection of the stems and plant and other undesirable waste (D).

3. Method according to claim 1, characterized in that the extraction of the juice and grapes detached by the crop package is achieved using a conveyor screen (5).

4. Method according to one of claims 1 or 3, characterized in that the hacking of bunches not picked off is achieved using a stemmer (6, 6') of the type with a latticed rotating drum (6a) containing a rotary stripping scraper (6b).

5. Method according to any of claims 1, 3 or 4, characterized in that the stemmer (6') of the destemming system (5-6') or of each destemming system is placed perpendicular to the extractor or sorter (5) of said system(s).

6. Method according to any of claims 1, 3 or 4, characterized in that the extractor (5) et the stemmer (6) are placed one after the other in an horizontal or roughly horizontal position.

7. Device according to claim 2, characterized in that the extractor (5) consists of a conveyor screen executed in the form of an endless belt provided with a mesh and holes sized so as let through only the juice and grapes already detached by the crop package (1).

8. Device according to one of claims 2 or 7, characterized in that the stemmer (6, 6') is of the type containing a latticed rotating drum (6a) and a rotary stripping scraper (6b) housed inside said drum.

9. Device according to claim 8, characterized in that the latticed drum (6a) and the stripping scraper (6b) of stemmer (6, 6') turn in reverse direction.

10. Device according to one of claims 2, 7, 8 or 9, characterized in that the extractor or sorter (5), or each extractor (5) of the destemming system (5, 6'), is installed parallel to the direction of supply of the machine on which said device is installed, while the stemmer (6') is mounted at an angle from said extractor (5).

11. Device according to any of claims 2, 7, 8, 9 or 10, characterized in that the stemmer (6') of the destemming system (5, 6'), or of each destemming system is placed perpendicular to the extractor or sorter (5) of said system(s).

12. Device according to one of claims 10 or 11, characterized in that a transporting means (7) transports the harvest from the outlet of the extractor or sorter (5) to the inlet of the stemmer (6').

13. Device according to claim 12, characterized in that said transporting means consists of a header auger (7).

14. Device according to any of claims 2, 7, 8 or 9, characterized in that the extractor (5) et stemmer (6) are placed one after the other in an horizontal or roughly horizontal position.

15. Device according to any of claims 2 or 7 through 13, characterized in that a suction means, for example consisting of an aspirator (9) is arranged above the extractor or sorter (5).

16. Harvesting machine, characterized in that it comprises at least one, and preferably two destemming systems (5-6 or 5-6') according to any of claims 2, or 7 through 15, installed between the sloping end of the harvesting conveyors (4) harvest collection bowls (3).

17. Harvesting machine according to claim 16, characterized in that the extractor or sorter (5) of the destemming system (5-6 or 5-6') is integral with the frame of said machine, while the stemmer (6') and the aspirator (9) are mounted on the on the casing of the harvest collection tipping bowls (3).